IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (New): A process for the continuously operated distillation of the solvent used in the synthesis of an oxirane by reaction of a hydroperoxide with an organic compound, wherein the mixture comprising the solvent which is obtained in the synthesis and subsequent work-up is separated in a dividing wall column into a low-boiling fraction, an intermediate-boiling fraction and a high-boiling fraction and the solvent is taken off as intermediate-boiling fraction from the side offtake of the column.

Claim 12 (New): The process as claimed in claim 11, wherein the organic compound used is propylene, the oxirane is propylene oxide and the solvent used is methanol.

Claim 13 (New): The process as claimed in claim 11, wherein the dividing wall column has from 15 to 60 theoretical plates.

Claim 14 (New): The process as claimed in claim 11, wherein the distillation is carried out at a pressure of from 0.5 to 15 bar and a temperature of from 30 to 140 °C, with the pressure being measured in the top of the column and the distillation temperature being measured at the side offtake.

Claim 15 (New): The process as claimed in claim 12, wherein the dividing wall column has from 15 to 60 theoretical plates and wherein the distillation is carried out at a pressure of from 0.5 to 15 bar and a temperature of from 30 to 140 °C, with the pressure

being measured in the top of the column and the distillation temperature being measured at the side offtake.

Claim 16 (New): The process as claimed in claim 11, wherein the dividing wall column is in the form of two thermally coupled columns.

Claim 17 (New): The process as claimed in claim 16, wherein the solvent mixture is separated into the low-boiling, intermediate-boiling and high-boiling fractions in the column located downstream of the feed column, or

the low-boiling and high-boiling fractions are taken off from the solvent mixture in the feed column and the intermediate-boiling fraction is taken off in the downstream column, or

the high-boiling fraction is taken off from the solvent mixture in the feed column and the low-boiling and intermediate-boiling fractions are taken off in the downstream column, or

the low-boiling fraction is taken off from the solvent mixture in the feed column and the intermediate-boiling and high-boiling fractions are taken off in the downstream column.

Claim 18 (New): The process as claimed in claim 16, wherein the liquid bottom stream taken from one of the coupled columns is partly or completely vaporized before it is fed to the other column, and the gaseous top stream taken from one of the coupled columns is partly or completely condensed before it is fed to the other column.

Claim 19 (New): The process as claimed in claim 16, wherein the liquid bottom stream taken from one of the coupled columns is partly or completely vaporized before it is

fed to the other column, or the gaseous top stream taken from one of the coupled columns is partly or completely condensed before it is fed to the other column.

Claim 20 (New): The process as claimed in claim 11, wherein the product mixture comprising the oxirane is prepared by a process comprising at least the steps (i) to (iii):

(i) reaction of the hydroperoxide with the organic compound to give a product mixture comprising the reacted organic compound and unreacted hydroperoxide,

(ii) separation of the unreacted hydroperoxide from the mixture resulting from step (i),

(iii) reaction of the hydroperoxide which has been separated off in step (ii) with the organic compound,

with an isothermal fixed-bed reactor being used in step (i), an adiabatic fixed-bed reactor being used in step (iii), a separation apparatus being used in step (ii) and hydrogen peroxide being used as hydroperoxide and the organic compound being brought into contact with a heterogeneous catalyst during the reaction.

Claim 21 (New): The process as claimed in claim 20, wherein the organic compound used is propylene, the oxirane is propylene oxide and the solvent used is methanol.

Claim 22 (New): The process as claimed in claim 21, wherein the dividing wall column has from 15 to 60 theoretical plates and wherein the distillation is carried out at a pressure of from 0.5 to 15 bar and a temperature of from 30 to 140 °C, with the pressure being measured in the top of the column and the distillation temperature being measured at the side offtake.

Claim 23 (New): The process as claimed in claim 20, wherein the dividing wall column is in the form of two thermally coupled columns.

Claim 24 (New): The process as claimed in claim 23, wherein the solvent mixture is separated into the low-boiling, intermediate-boiling and high-boiling fractions in the column located downstream of the feed column, or

the low-boiling and high-boiling fractions are taken off from the solvent mixture in the feed column and the intermediate-boiling fraction is taken off in the downstream column, or

the high-boiling fraction is taken off from the solvent mixture in the feed column and the low-boiling and intermediate-boiling fractions are taken off in the downstream column, or

the low-boiling fraction is taken off from the solvent mixture in the feed column and the intermediate-boiling and high-boiling fractions are taken off in the downstream column.

Claim 25 (New): The process as claimed in claim 24, wherein the liquid bottom stream taken from one of the coupled columns is partly or completely vaporized before it is fed to the other column, and the gaseous top stream taken from one of the coupled columns is partly or completely condensed before it is fed to the other column.

Claim 26 (New): The process as claimed in claim 24, wherein the liquid bottom stream taken from one of the coupled columns is partly or completely vaporized before it is fed to the other column, or the gaseous top stream taken from one of the coupled columns is partly or completely condensed before it is fed to the other column.

Claim 27 (New): A process for the continuously operated distillation of the methanol solvent used in the synthesis of propylene oxide by reaction of hydrogen peroxide with propene, wherein the mixture comprising methanol which is obtained in the synthesis and subsequent work-up is separated in a dividing wall column having from 15 to 60 theoretical plates into a low-boiling fraction, an intermediate-boiling fraction and a high-boiling fraction and the methanol is taken off as intermediate-boiling fraction from the side offtake of the column, the distillation in the column being carried out at a pressure of from 0.5 to 15 bar and a temperature of from 30 to 140 °C, with the pressure being measured in the top of the column and the distillation temperature being measured at the side offtake, which process further comprises at least the steps (i) to (iii)

(i) reaction of hydrogen peroxide with propene to give a product mixture comprising propylene oxide and unreacted hydrogen peroxide,

(ii) separation of the unreacted hydrogen peroxide from the mixture resulting from step (i),

(iii) reaction of the hydrogen peroxide which has been separated off in step (ii) with propene,

with at least one isothermal fixed-bed reactor being used in step (i), one adiabatic fixed-bed reactor being used in step (iii), and a separation apparatus being used in step (ii).

Claim 28 (New): An apparatus for carrying out a continuously operated process for the distillation of the solvent used in the synthesis of an oxirane by reaction of a hydroperoxide with an organic compound, which comprises at least one isothermal fixed-bed

reactor and one adiabatic fixed-bed reactor and a separation apparatus for preparing an oxirane in a process comprising at least the steps (i) to (iii):

(i) reaction of the hydroperoxide with the organic compound to give a product mixture comprising the reacted organic compound and unreacted hydroperoxide,

(ii) separation of the unreacted hydroperoxide from the mixture resulting from step (i),

(iii) reaction of the hydroperoxide which has been separated off in step (ii) with the organic compound,

with the isothermal fixed-bed reactor being used in step (i), the adiabatic fixed-bed reactor being used in step (iii), and the separation apparatus being used in step (ii), the apparatus further comprising a dividing wall column or two thermally coupled columns for the distillation of the solvent.